IN THE CLAIMS

Claim 1 (currently amended) A flow-through electrochemical reactor for the treatment of wastewater from a debarking process the wastewater being forced through the reactor to lower organic compounds present in the wastewater to an environmentally acceptable level comprising:

a body having an internal chamber, and an inlet port and an outlet port in communication with said internal chamber ~~to permit a forced flow of wastewater therethrough~~, said inlet port and outlet port in sealing engagement with the internal chamber and adapted for sealed connection to an open recirculating system;

a series of sponge type metallic electrodes ~~at least one porous anode~~ arranged in said internal chamber such that the wastewater flowing between said inlet port and said outlet port flows through ~~the~~ openings ~~pores~~ of said sponge type metallic electrodes, ~~at least one porous anode, said~~ at least one of said foam type metallic electrodes ~~porous anode~~ having activity for the destruction of a target substance such as phenol and cresols; ~~and~~

~~at least one porous cathode disposed in the internal chamber to permit an electric current to be established between said at least one cathode and said at least one anode, said electric current reducing the concentration of said target substance in the wastewater flowing through the chamber wherein the anode and cathode each have a pore size to withstand a forced flow of wastewater up to 60 litres/min~~

said series of sponge type metallic electrodes having sufficient mechanical strength to withstand a flow of 60 litres/min or more, the series of electrodes comprising and alternating arrangement of cathodes and anodes there being at least three cathodes and two anodes the cathodes being negatively charged and the anodes being positively charged.

Claim 2 (cancelled)

Claim 3 (currently amended) A flow-through electrochemical reactor according to claim 1, wherein the ~~porous~~ anodes comprises a substrate ~~coated~~ having a ~~an anodic~~ coating of antimony-doped tin oxide.

Claim 4 (currently amended) A flow-through electrochemical reactor according to claim 3, wherein the substrate is ~~tantalum or~~ titanium.

Claims 5-7 (cancelled)

Claim 8 (currently amended) A flow-through electrochemical reactor according to claim 1, wherein the cathodes ~~comprises nickel~~ are made from ferrous alloy.

Claim 9 (currently amended) A flow-through electrochemical reactor according to claim 1, wherein the body can hold ~~is tubular and the internal chamber is generally cylindrical, and wherein each anode and cathode is supported by an insulating holder to avoid displacement of~~ the anodes and cathodes in the chamber such that they do not touch and cause short-circuits.

Claims 10 – 12 (cancelled)

Claim 13 (previously amended) A flow-through electrochemical reactor according to claim 1, wherein the target substance is phenol, o-cresol, m-cresol or p-cresol.

Claims 14-16 (cancelled)

Claim 17 (currently amended) A flow-through electrochemical reactor according to claim 4, wherein the anodes have ~~has~~ a diameter of about 1.5 m and a thickness of about 0.5 cm.

Claims 18 –23 (cancelled)

Claim 24 (new) The flow through electrochemical reactor according to claim 1 wherein said sponge type metallic electrodes have openings sufficient to provide enough hydrodynamic turbulence to promote oxidation activity and allow liquid flow with minimal resistance.

Claim 25 (new) The flow through electrochemical reactor according to claim 1 wherein said sponge type metallic electrodes can withstand a high back flow water circulation for chamber clean up.

Claim 26 (new) The flow through electrochemical reactor according to claim 1 having a current density of between 0.7 mA/cm2 and 70 mA/cm2 between respective cathodes and anodes.

Claim 27 (new) The flow through electrochemical reactor according to claim 26 wherein for different target compounds zones of different current densities are formed.

Claim 28 (new) The flow through electrochemical reactor according to claim 27 wherein the distance between the electrodes is changed to alter current densities.